THE FOLLOWING IS THE ENGLISH TRANSLATION OF THE ANNEXES TO THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT UNDER ARTICLE 34: Amended Sheets (pages 3, 3/1, 28, 28/1, 30, 30/1)

10/591764 IAP9 Rec'd PCT/PTO 01 SEP 2006

Japanese Unexamined Patent Publication (KOKAI) No. 09-132,515

[Patent Literature No. 2]

Domestic Re-publication of PCT International Publication for Patent Applications No. 00-064,298

DISCLOSURE OF THE INVENTION

[0008] (Assignment to be solved by the Invention)

[0009] The present invention is one which has been done while taking the aforementioned circumstance into consideration, and it is an object to provide a permanent treatment method which can maintain a straight-hair state of hair for a long time.

[0010] (Means for Solving the Assignment)

(0011) A permanent treatment method of the present invention is characterized in that: a permeating step of adhering a permanent treatment liquid, which includes thioglycolic acid, down to a position, which is adjacent to the hair root of hair, which has been shampooed and from which a hair dressing, the oil contents, and the like, have been removed, thereby permeating the permanent treatment liquid down to the hair root of the hair; and a shaping step of pulling the hair with a predetermined force while warming the hair, which is in such a state that the permanent treatment liquid is adhered thereon, to a predetermined temperature, thereby shaping it to straight hair.

[0012] In the aforementioned permanent treatment method of the present invention, between said permeating step and said shaping step, it is preferable to be equipped with a treatment-liquid absorbing step of sprinkling a treatment powder, which adsorbs or absorbs said permanent treatment liquid, onto at least a part of said hair to transfer said permanent treatment liquid from said hair to the treatment powder, thereby stopping the shaping temporarily.

[0013] In the permanent treatment method of the present invention, the concentration of said thioglycolic acid, which is included in

CLAIMS

1. (Amended) A permanent treatment method, being characterized in that it is equipped with: a permeating step of adhering a permanent treatment liquid, which includes thioglycolic acid, down to a position, which is adjacent to the hair root of hair, which has been shampooed and from which a hair dressing, the oil contents, and the like, have been removed, thereby permeating the permanent treatment liquid down to the hair root of the hair; and

a shaping step of pulling the hair with a predetermined force while warming the hair, which is in such a state that the permanent treatment liquid is adhered thereon, to a predetermined temperature, thereby shaping it to straight hair.

- 2. The permanent treatment method set forth in claim 1, being characterized in that, between said permeating step and said shaping step, it is equipped with a treatment-liquid absorbing step of sprinkling a treatment powder, which adsorbs or absorbs said permanent treatment liquid, onto at least a part of said hair to transfer said permanent treatment liquid from said hair to the treatment powder, thereby stopping the shaping temporarily.
- 3. The permanent treatment method set forth in claim 1 or 2, being characterized in that the concentration of said thioglycolic acid, which is included in said permanent treatment liquid, is 7% by weight or less of the entirety of said permanent treatment liquid.
- 4. The permanent treatment method set forth in claim 1 or 2, being

characterized in that said permanent treatment liquid further includes cysteine, and the sum of the concentration of said

said treatment powder is sprinkled, with ultrasonic vibrating means.

- 10. The permanent treatment method set forth in claim 8 or 9, being characterized in that said ultrasonic vibrating means is equipped with an ultrasonic oscillator and an ultrasonic-waves absorbing plate, which is disposed to face the oscillator with a variable interval provided therebetween; and said vibrating is carried out while holding said hair, which is in such a state that said permanent treatment liquid is adhered thereon, or said hair on which said treatment powder is sprinkled, between the ultrasonic oscillator and the absorbing plate.
- 11. The permanent treatment method set forth in claim 8 or 9, being characterized in that said ultrasonic vibrating means is equipped with an ultrasonic oscillator and an ultrasonic -waves reflector plate, which is disposed to face the oscillator so as to make the interval with respect to the oscillator an integer multiple of 1/2 of the wavelength of an ultrasonic wave, which the ultrasonic oscillator generates; and said vibrating is carried out while holding said hair, which is in such a state that said permanent treatment liquid is adhered thereon, or said hair on which said treatment powder is sprinkled, between the ultrasonic oscillator and the reflector plate.
- 12. (Amended) The permanent treatment method set forth in either one claim of claims 1 through 11, being characterized in that said predetermined temperature in said shaping step is 100 °C or more.
- 13. (Added) The permanent treatment method set forth in either one

claim of claims 1 through 12, being characterized in that said predetermined force in said shaping step is $0.5~{\rm kg/cm^2}$ or more.